

Global United Technology Services Co., Ltd.

Report No.: GTSL2023060427F01

TEST REPORT

ARTIKA FOR LIVING INC Applicant:

1756 50th avenue, Lachine, Quebec, Canada H8T 2V5 **Address of Applicant:**

Manufacturer/Factory: Foshan Topday Optoelectronics Technology Co.,Ltd.

Huansheng Road, Guicheng Eastern Industrial Zone Address of

Manufacturer/Factory: B, Sanshan Nanhai District, Foshan, China

Equipment Under Test (EUT)

Product Name: Cosmic Single 3CCT Pendent

Model No.: PDT1-CSC-XXXXXX

("XXXXXX" can be A to Z and/or 0 to 9 and/or blank

(commercial code))

Trade Mark: Artika

FCC ID: 2AUHG-PDT1-CSC

Applicable standards: FCC CFR Title 47 Part 15 Subpart B

April 08, 2023 Date of sample receipt:

Date of Test: April 12-13, 2023

Date of report issued: April 18, 2023

Test Result: Pass *

Authorized Signature:

Robinson Luo Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

^{*} In the configuration tested, the EUT complied with the standards specified above.



2 Version

Version No.	Date	Description
00	April 18, 2023	Original

Prepared by:	Date:	April 18, 2023
	Project Engineer	
Reviewed by:	Date:	April 18, 2023

Reviewer



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4 Test Summary

Test Item	Test Requirement	Test Method	Class / Severity	Result	
Conducted Emission	FCC Part15.107	ANSI C63.4	Class B	PASS	
Radiated Emissions #	FCC Part15.109	ANSI C63.4	Class B	PASS	

Remark:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- 2. # Refer to FCC Part 15.33 (b)(1) conditional testing procedure :

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

Measurement Uncertainty

Test Item	Frequency Range Measurement Uncertainty		Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)
Note (1): The measurement unce	ertainty is for coverage factor of k	=2 and a level of confidence of 9	95%.



5 General Information

5.1 General Description of EUT

Product Name: Cosmic Single 3CCT Pendent					
	Model No.:	PDT1-CSC-XXXXXX ("XXXXXX" can be A to Z and/or 0 to 9 and/or blank (commercial code))			
R	Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits.				
T	The difference is model name for commercial purpose.				
	Power supply:	AC120V, 60Hz, 17W			

5.2 Test mode and Test voltage

Test mode:	
Operation mode	Keep the EUT in the operation status.
Test voltage:	
AC 120V/60Hz	

5.3 Description of Support Units

None.

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.



5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• FCC —Registration No.: 381383

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

• IC —Registration No.: 9079A

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

• NVLAP (LAB CODE:600179-0)

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.7 Test Location

Tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan

District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960



6 Test Instruments list

Rad	Radiated Emission:						
ltem	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	June 23, 2021	June 22, 2024	
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A	
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	April 14, 2023	April 13, 2024	
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 19, 2023	March 18, 2025	
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	April 17, 2023	April 16, 2025	
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
7	Coaxial Cable	GTS	N/A	GTS213	April 21, 2023	April 20, 2024	
8	Coaxial Cable	GTS	N/A	GTS211	April 21, 2023	April 20, 2024	
9	Coaxial cable	GTS	N/A	GTS210	April 21, 2023	April 20, 2024	
10	Coaxial Cable	GTS	N/A	GTS212	April 21, 2023	April 20, 2024	
11	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 14, 2023	April 13, 2024	
12	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov. 29, 2022	Nov. 28, 2023	
13	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 14, 2023	April 13, 2024	
14	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 14, 2023	April 13, 2024	
15	Horn Antenna (18- 26.5GHz)	1	UG-598A/U	GTS664	Oct. 30, 2022	Oct. 29, 2023	
16	Horn Antenna (26.5-40GHz)	A.H Systems	SAS-573	GTS665	Oct. 30, 2022	Oct. 29, 2023	
17	FSV-Signal Analyzer (10Hz- 40GHz)	Keysight	FSV-40-N	GTS666	March 13, 2023	March 12, 2024	
18	Amplifier	1	LNA-1000-30S	GTS650	April 14, 2023	April 13, 2024	
19	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS668	Dec. 20, 2022	Dec.19, 2023	



Con	Conducted Emission							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	July 12, 2022	July 11, 2027		
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 14, 2023	April 13, 2024		
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	April 14, 2023	April 13, 2024		
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A		
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
6	Thermo meter	JINCHUANG	GSP-8A	GTS639	April 18, 2023	April 17, 2024		
7	Absorbing clamp	Elektronik- Feinmechanik	MDS21	GTS229	April 14, 2023	April 13, 2024		
8	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 14, 2023	April 13, 2024		
9	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 14, 2023	April 13, 2024		
10	Antenna end assembly	Weinschel	1870A	GTS560	April 14, 2023	April 13, 2024		

Ge	General used equipment:						
Iten	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	April 18, 2023	April 17, 2024	
2	Barometer	KUMAO	SF132	GTS647	April 19, 2023	April 18, 2024	



Test Results and Measurement Data 7

7.1 Radiated Emission

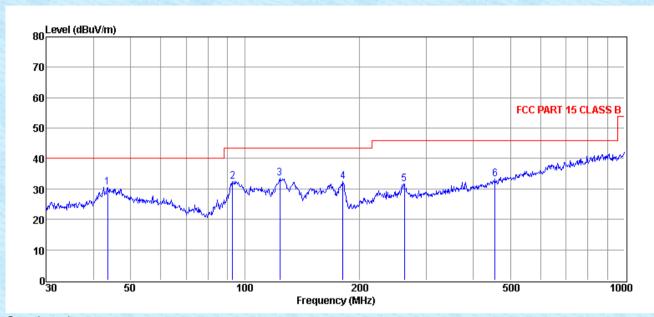
Test Requirement:	FCC Part15 B Section 15.109					
Test Method:	ANSI C63.4:2014					
Test Frequency Range:	30MHz to 1GHz					
Class / Severity:	Class B					
Test site:	Measurement Dist	ance: 3m (Sem	i-Anechoic (Chamber)		
Receiver setup:						
	Frequency	Detector	RBW	VBW	Value	
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak	
Limit:						
	Frequency	Limit (dB	uV/m @3m)		Value	
	30MHz-88MHz		0.00	Qu	asi-peak	
	88MHz-216MHz		3.50		asi-peak	
	216MHz-960MH		6.00		asi-peak	
	960MHz-1GHz	54	4.00	Qu	asi-peak	
	Antenna Tower Artenna Antenna Tower (Turntable) Ground Reference Plane Test Receiver Anything Controlles					
Test Procedure:	 The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and 					



	6. If the em the limit values o did not h peak, qu	Specified Bandwidth with Maximum Hold Mode. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.						
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar							
Test Instruments:	Refer to secti	Refer to section 6 for details						
Test mode:	Refer to secti	Refer to section 5.2 for details						
Test results:	Pass	Pass						



Measurement Data



Quasi-peak measurement:

Item	Freq (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector
(Mark)				uБ		, ,	, , ,		The state of the s
1	43.51	13.21	16.58	0.00	0.67	30.46	40.00	-9.54	Peak
2	92.79	21.17	10.39	0.00	0.82	32.38	43.50	-11.12	Peak
3	123.70	23.80	8.65	0.00	1.04	33.49	43.50	-10.01	Peak
4	181.28	21.46	9.50	0.00	1.38	32.34	43.50	-11.16	Peak
5	262.90	16.68	13.06	0.00	1.98	31.72	46.00	-14.28	Peak
6	455.91	13.17	16.84	0.00	3.31	33.32	46.00	-12.68	Peak

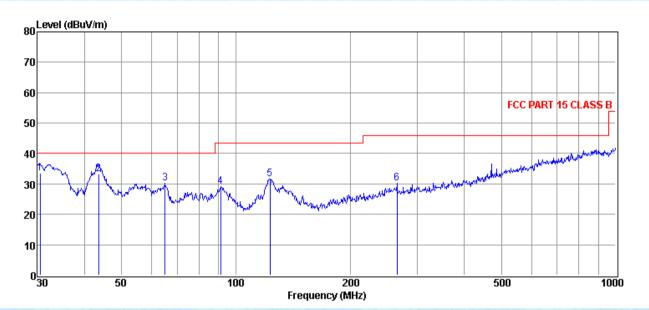
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss

2. If Peak Result comply with QP limit, QP Result is deemed to comply with QP limit

3. Test setup: RBW: 120kHz, VBW: 300kHz, Sweep time: auto



Test mode: Operation mode Antenna Polarity: Vertical	
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Quasi-peak measurement:

Quasi p	can ilicasi	arcinont.		50	100000000000000000000000000000000000000		the second secon		market by the second
Item (Mark)	Freq (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector
1	30.53	22.45	10.63	0.00	0.48	33.56	40.00	-6.44	QP
2	43.51	16.01	16.58	0.00	0.67	33.26	40.00	-6.74	QP
3	65.11	18.16	11.46	0.00	0.69	30.31	40.00	-9.69	QP
4	91.18	18.86	9.55	0.00	0.84	29.25	43.50	-14.25	Peak
5	122.83	21.95	8.69	0.00	1.03	31.67	43.50	-11.83	Peak
6	265.68	15.05	13.11	0.00	1.97	30.13	46.00	-15.87	Peak

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss

- 2. If Peak Result comply with QP limit, QP Result is deemed to comply with QP limit
- 3. Test setup: RBW: 120kHz, VBW: 300kHz, Sweep time: auto



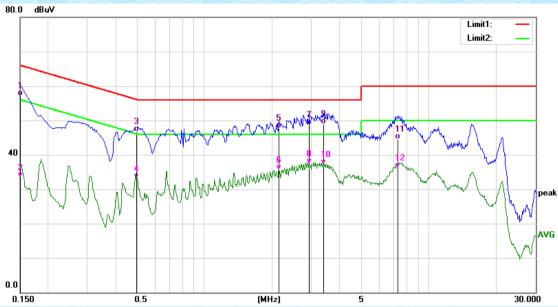
7.2 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107							
Test Method:	ANSI C63.4:2014							
Test Frequency Range:	150kHz to 30MHz							
Class / Severity:	Class B							
Receiver setup:	RBW=9kHz, VBW=30kHz							
Limit:	Frequency range (MHz) Limit (dBµV) Quasi-peak Average							
	0.15-0.5	66 to 56*	56 to 46*					
	0.5-5	56	46					
	5-30	60	50					
Test setup:	* Decreases with the logarithm Reference F							
Test procedure	AUX Equipment E.U.T Test table/Insulation plane Remark: E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m							
rost procedure	 The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement. 							
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar							
Test Instruments:	Refer to section 6 for details							
Test mode:	Refer to section 5.2 for details							
Test results:	Pass							

Measurement Data



Test mode: Operation mode Phase Polarity: Line

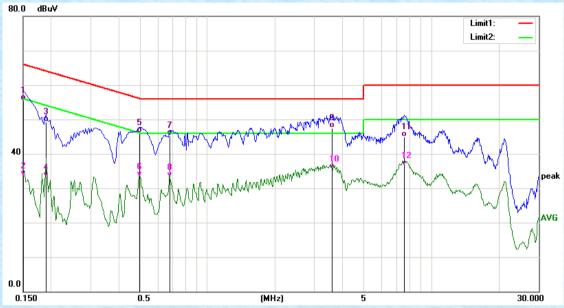


Quasi-peak and Average measurement:

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1500	47.32	9.73	57.05	66.00	-8.95	QP
2	0.1500	23.65	9.73	33.38	56.00	-22.62	AVG
3	0.4980	36.52	10.10	46.62	56.03	-9.41	QP
4	0.4980	22.90	10.10	33.00	46.03	-13.03	AVG
5	2.1500	37.54	10.07	47.61	56.00	-8.39	QP
6	2.1500	25.51	10.07	35.58	46.00	-10.42	AVG
7	2.9460	38.49	10.25	48.74	56.00	-7.26	QP
8	2.9460	27.03	10.25	37.28	46.00	-8.72	AVG
9	3.3820	38.53	10.35	48.88	56.00	-7.12	QP
10	3.3820	26.68	10.35	37.03	46.00	-8.97	AVG
11	7.2860	34.10	10.49	44.59	60.00	-15.41	QP
12	7.2860	25.58	10.49	36.07	50.00	-13.93	AVG







Quasi-peak and Average measurement:

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1-	0.1500	45.87	9.73	55.60	66.00	-10.40	QP
2	0.1500	23.83	9.73	33.56	56.00	-22.44	AVG
3	0.1900	39.54	9.76	49.30	64.04	-14.74	QP
4	0.1900	23.33	9.76	33.09	54.04	-20.95	AVG
5	0.4980	35.94	10.10	46.04	56.03	-9.99	QP
6	0.4980	23.24	10.10	33.34	46.03	-12.69	AVG
7	0.6820	35.08	10.16	45.24	56.00	-10.76	QP
8	0.6820	22.94	10.16	33.10	46.00	-12.90	AVG
9	3.5860	37.17	10.40	47.57	56.00	-8.43	QP
10	3.5860	25.20	10.40	35.60	46.00	-10.40	AVG
11	7.5620	34.51	10.49	45.00	60.00	-15.00	QP
12	7.5620	26.09	10.49	36.58	50.00	-13.42	AVG

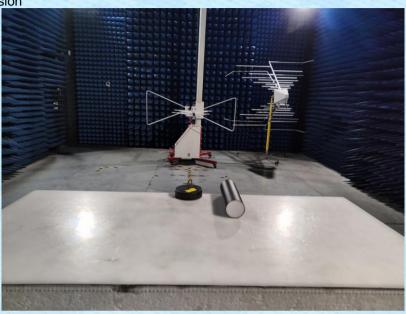
Notes:

- 1. An initial pre-scan was performed on the live and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Receiver Read level + LISN Factor + Cable Loss



8 Test Setup Photo

Radiated Emission



Conducted Emission





9 EUT Constructional Details





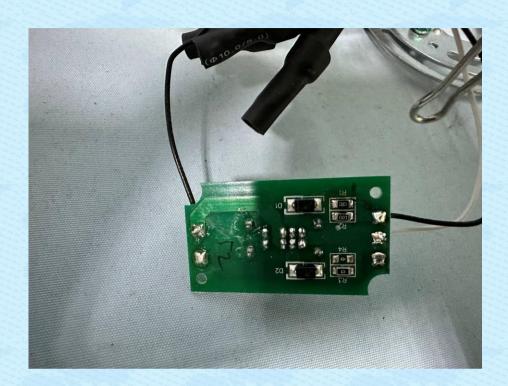








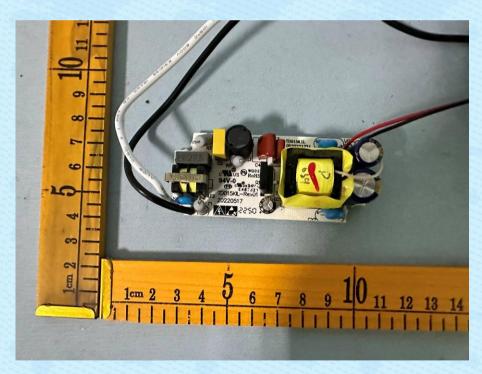
GTS



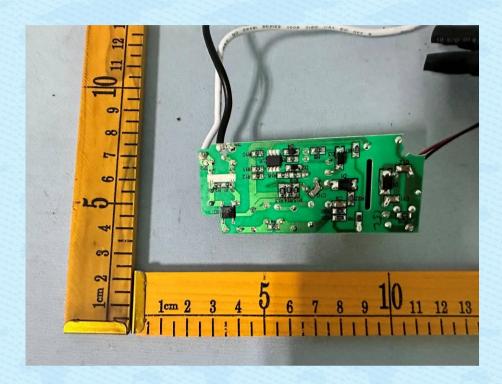


GTS









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